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云南秋海棠属植物小志*

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摘要　描写了云南产秋海棠属 6 个新种 1 个新变种，它们是澜沧秋海棠、角果秋海棠、盈江秋海棠、粉叶秋海棠、蔓耗秋海棠、斜叶秋海棠、红毛香花秋海棠，补充描述了 8 个种及新命名 1 种，即四棱秋海棠、不显秋海棠、薄叶秋海棠、截裂秋海棠、长柔毛秋海棠、光叶秋海棠、变色秋海棠、假厚叶秋海棠、河口秋海棠。

关键词　秋海棠属，新种，新变种，补充描述，新名，云南
分类号　Q 949

Notes on the Genus *Begonia* from Yunnan

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Abstract　Six new species and one new variety of the genus *Begonia* from Yunnan, China are described. They are *Begonia lancangensis* S. H. Huang, *B. ceratocarpa* S. H. Huang & Shui, *B. yingjiangensis* S. H. Huang, *B. subhowii* S. H. Huang, *B. manhaoensis* S. H. Huang et Shui, *B. obliquefolia* S. H. Huang et Shui, *B. balansana* Gagn. var. *rubropilosa* S. H. Huang & Shui. Eight species are described additionally and one species is named newly. They are *B. tetragona* Irmsch., *B. obsolescens* Irmsch., *B. laminariae* Irmsch., *B. truncatiloba* Irmsch. , *B. villifolia* Irmsch., *B. psilophylla* Irmsch., *B. versicolor* Irmsch., *B. hekouensis* S.H.Huang., *B. pseudodryadis* C.Y.Wu.

Key words　*Begonia*, New species, New variety, Additional description, New name, Yunnan

无翅组 Sect. Sphenanthera A. DC.

1. 香花秋海棠

Begonia balansana Gagn. in Bull. Mus. Hist. Nat. 25:194(1919), "Balansaeana" et in Lecomte FL. Gen. Indo－Chine 2: 1114(1921); L. B. Smith et al. "Begoniaceae" (1986), fig. 23. 13.—— *Begonia handelii* Irmsch. in Akad. Wiss. Wein. Math. Natur. K.Anz. 58:24, (1921); (1927), (1939), syn. nov.

1a. 香花秋海棠(原变种)

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var. **balansana**

分布于云南东南部（河口、金平、屏边、麻栗坡、富宁等地）。广西，广东，海南也有分布。

据 *B. balansana Gagn*. 的原描述及照片与 *B. handelii* Irmsch. 比较，形态特征基本一致，同时还观察了滇东南地区采集的 *B. handelii* 的栽培植株，子房从4～6室变动，因此作此归并。

1b. **红毛香花秋海棠**（新变种）

var. **rubropilosa** S. H. Huang et Shui, var. nov.

A var. *balansanae* differt plantis rubropilosis, fructibus minoribus, pedicellis longioribus.

Yunnan（云南）: Pingbian Xian（屏边县），Daweishan（大围山），alt. 1 400 m, Ⅲ 1991, Shui Yumin（税玉民）B91－78 (holotype in YUNU).

与原变种区别在于植物体被红色疏柔毛，果较小，果梗较长。

2. **四棱秋海棠** 图1：1～6.

Begonia tetragona Irmsch. in Mitt. Inst. Allg. Bot. Hamburg. 10: 515 (1939); L. B. Smith et al. "Begoniaceae" 57, 106, 110, 494 (1986). fig. 20. 11.

Add. describ.



图1　1～6:四棱秋海棠

1. 花枝；2. 雌花；3. 雌花外被片；4. 雌花内被片；5. 花柱和柱头；6. 雄蕊；7～9. 澜沧秋海棠；7. 花枝；8. 雌花；9. 花柱和柱头（吴锡麟绘）

Fig. 1　1～6. *Begonia tetragona* Irmsch. 1. Flowering branch; 2. female flower; 3. external petal of female flower; 4. internal petal of female; 5. style and stigma; 6. stamen; 7～9. Begonia lancangensis S. H. Huang 7. flowering branch; 8. female flower; 9. style and stigma. (Drawn by Wu Xi－Lin)

Flores ♂: pedicelli 2 ~ 2.5 cm longi; tepala 4, alba, glabra, 2 exteriora ovata, 1.5 ~ 2.3 cm longa, 1.3 ~ 1.8 cm lata, 2 interiora, oblonga vel ovata, leviter angusta, 1 ~ 1.9 cm longa, 1 ~ 1.2 cm lata; stamina numerosa, distincta, filamentis 2 ~ 2.5 mm longis, antheris oblongis, 1.5 ~ 2 mm longis, connectivis productis 0.5 mm longis, apice obtusis. Flores ♀: pedicelli 0.8 ~ 1 cm longi; tepala 4, alba vel roseola, glabra 2 exteriora late ovata, 1.4 ~ 2.4 cm longa, 1.1 ~ 1.2 cm lata, 2 interiora, leviter angusta, 1.3 ~ 2.2 cm longa, 0.8 ~ 1.4 cm lata; ovarium 4 ~ loculatum, in quoque loculo placentae segmentis 2; styli 4, stigmatibus 2 – ramosis, 3 ~ 4 spiraliter contortis, papillosis.

Yunnan(云南): Mengzi Xian(蒙自县), Henry n.10737A(syntype Herb. B. E); Pingbian Xian(屏边县)Daweishan(大围山), alt. 1 510 m, Ⅲ 1991, Shui Yumin(税玉民) B91 – 75(fl. ♀ ♂. in YUNU)。

产云南东南部至西北部（麻栗坡、屏边、绿春、元阳、个旧、蒙自、西双版纳，沧源、景东、贡山等地）。

3. **澜沧秋海棠**（新种）图 1: 7 ~ 9.

Begonia lancangensis S. H. Huang, sp. nov.

Species *B. tetragonae* Irmsch. affinis, sed foliis oblique ovati, vel ovato – oblongis, glabris, petiolis longioribus, floribus ♀ majoribus, albis vel rubellis differt.

Herba perennis, Caulis 25 ~ 30 cm altus, circ. 1.3cm diam., glaber, internodiis 3 ~ 5 cm longis. Rhizoma repens, circ. 1 cm diam.; stipulae ovato – triangulatae, brunneae, 1.2 cm longae, apice acuminatae, basi 0.8 ~ 1 cm latae, glabrae; petioli basalia 20 ~ 30 cm longi; laminae chartaceae, ovatae vel ovato – oblongae, valde oblique, 10 ~ 14 cm longae, 7 ~ 9.5 cm latae, apice acuminatae, basi oblique cordatae, supra virides, glabrae, subtus viridulae, glabrae, margine leviter repandae parce irregulari – denticulatae, nervis palmatis 6 ~ 7, basilaribus extrorsis 3 ~ 4, introrsis 2 ~ 3, subtus nervis reticulatis leviter prominentibus. Dioecia. Flores ♂ ignotis. Flores ♀: Cymae axillares, 2 ~ 3 florae, pedunculo valde brevi; pedicelli 2.5 ~ 4 cm longi, glabrae, vel leviter puberulae, basi 2 ~ 3 bractae; bractae ovatae, 1.4 cm longae, 0.7cm latae, apice acutae, apiculae, glabrae; tepala 4, albae vel rubellae, 2 exteriora majora, late ovata, 2.5 ~ 3.2 cm longa, 1.8 ~ 2 cm lata, apice obtusa, 2 interiora obovato – oblonga, 1.8 ~ 2 cm longa, 0.7 ~ 1 cm lata, apice orbiculata; ovarium obovatum, 1cm longum, 4 – loculare, in quoque loculo placentae segmentis 2 praedita, subaequaliter brevium 4 – alatum, ala triangulata, circ. 4 mm longa, parce puberula; styli 4, ad 1/2 in ramosis 2, stigmatibus spiraliter contortis, papillosis.

Yunnan(云南): Lancang Xian(澜沧县)Fazhan He(发展河), alt. 1 600 m, Ⅲ 1995, Huang Suhua(黄素华) 95001 (holotype in YUNU). Rootstocks collected by Huang Rhui – fu from Lancang Xian, Fazhan He, under evergreen broad – leaved forests, 1993. cultivated in the greenhouse of Yunnan University.

本种近四棱秋海棠，但叶偏斜卵形或卵状长圆形，无毛，叶柄较长，雌花较大，白色或淡红色而异。

4. **角果秋海棠**（新种）图 2.

Begonia ceratocarpa S. H. Huang et Shui, sp. nov.

Species *B*. *balansanae* Gagn. affinis, sed fructibus minimis, trilocularibus, rhombicis, non alatis, dorso in medio cornutis, floribus minoribus valde insignis.

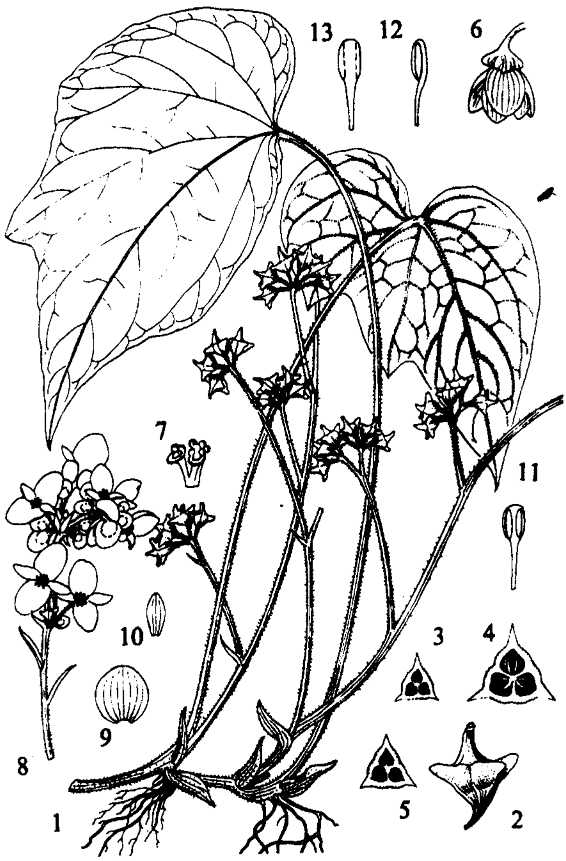


图2 角果秋海棠

1. 果枝; 2. 果; 3~5. 果的上、中、下横切面; 6. 雌花; 7. 花柱和柱头; 8. 花序; 9. 雄花的外被片; 10. 雄花的内被片; 11~13. 雄蕊的腹面、侧面和背面观(吴锡麟绘)

Fig. 2 *Begonia ceratocarpa* S. H. Huang et Shui. 1. fruit branch; 2. fruit; 3~5. upper, medial and inferior transverse section of fruit; 6. female flower; 7. style and stigma; 8. inflorescence; 9. external petal of male flower; 10. internal petal of male flower; 11~1 3. ventral, lateral and dersal plane of stamen (Drawn by Wu Xi-Lin).

Herba perennis, acaulis. Rhizoma repens, 5~6 mm diam. internodiis 1~3.5 cm longis, pubescentibus. Stipulae ovato~oblongae, 2.5 cm longae, 1 cm latae, apice acuminatae, basi rotundatae, extus leviter pubescentes, margine subintegrae, parce ciliatae. Folia basalia; petioli 23~30 cm longi, angulati, dense pubescentes; laminae chartaceae, ovato-oblongae, valde oblique, 14~16 cm longae, 7~8 cm latae, apice acuminatae, basi valde oblique cordatae, lobi exteriora 3~4 cm longi , 4-5 cm lati, interiora 3~4 cm lati, supra viridis subglabrae, subtus viridulae, secus nervos villosae, nervis palmatis, reticulatis prominentibus, nervis extrorsis basilaribus 3~4, introrsis basilaribus 2~3, margine leviter repandis vel subintegris, interdum 1~2 lobatis, Inflorescentiae paniculatae, 20 cm longae, cymae 2~3(-4), peduncullo 5~10 cm longae, pedunculi cymarum 3~6.5 cm longi, superne sensim breves, glabri, cymae 3~7 florae; bracteae lanceolatae, 7~8 mm longae, 2~3 mm latae, apice acuminatae, extus parce puberuli. Flores ♂ : pedicelli 7~12 mm longi, gracili, puberuli; tepala 4, rubella, 2 exteriora majora, late ovata ad suborbiculata, 10~13 mm longae, 8~12 mm lata, apice rotundata, basi leviter attenuata, glabra, 2 interiora minor, obovato-lanceolata, 10 mm longa, 4 mm lata, apice leviter attenuata, obtusa, basi attenuata, glabra; stamina nu-

merosa, distincta, filamenta 2mm longa, antherae obovato – oblongae, flavae, 2 mm longae, connectivo apice leviter dilatato, obtuso. Flores♀: pedicelli 5 ~ 7 mm longi, puberuli; tepala 5, rubella, late obovata, interiora minor, 5 ~ 7 mm longa, 4 ~ 6 mm lata, apice rotundata, basi attenuata, glabra; ovarium triloculatum, in quoque loculo placentae segmentis 2 praedita, dorso loculi in medio cornuto; styli 3, stigmatibus in ramosis 2, lyratis contortis, papillosis. Capsula minima, rhombica, 10 mm longa, 12 mm lato, pedicello 5 ~ 7 mm longo, triloculata, dorso loculi in medio cornuto, 2 ~ 3 mm longo, puberulo.

Yunnan(云南): Hekou Xian(河口县), Nanxi(南溪)Machang(马场), alt. 350 ~ 400 m, I 1992, Shui Yumin (税玉民) B92 – 06 (holotype in YUNU, isotype in PE); ibid. X. 1992, Huang Suhua(黄素华)92071 (fl. in YUNU).

本种近 *Begonia balansana Gagn*. 但果极小,3 室,菱形,无翅,室背中部具角状突起,花小,极特异。

秋海棠组 Sect. Begonia

1. 不显秋海棠 图 3:1 ~ 9.

Begonia obsolescens Irmsch. in Notes Roy. Bot. Gard. Edinb. 21: 37(1951);图鉴补编 2: 538, 514(1983);云南种子植物名录(上册), 351(1984);L. B. Smith et al. "Begoniaceae" 87, 207(1986).

add. describ.

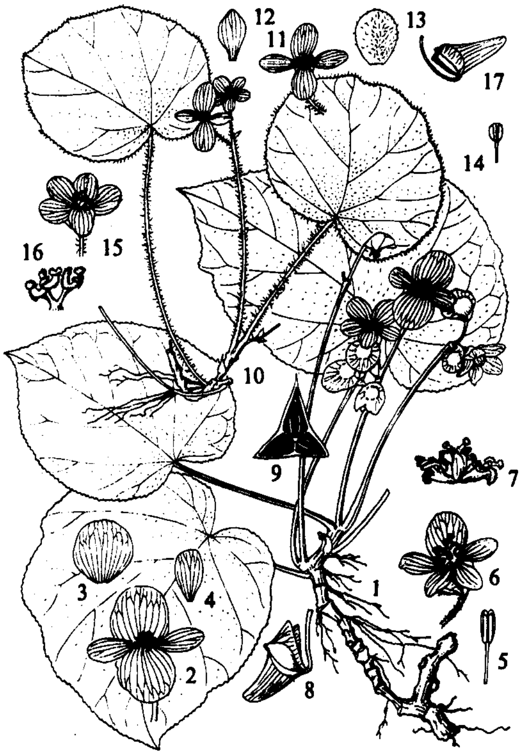


图 3 1 ~ 9:不显秋海棠 1. 花枝; 2. 雄花; 3. 雄花外被片; 4. 雄花内被片; 5. 雄蕊; 6. 雌花; 7. 花柱和柱头; 8. 蒴果; 9. 蒴果横切。10 ~ 17:变色秋海棠 10. 植物体; 11. 雄花; 12. 雄花内被片; 13. 雄花外被片; 14. 雄蕊; 15. 雌花; 16. 花柱和柱头; 17. 蒴果(吴锡麟绘)

Fig. 3 1 ~ 9. *Begonia obsolescens* Irmsch. 1. flowering branch; 2. male flower; 3. external petal of male flower; 4. internal petal of male flower; 5. stamen; 6. female flower; 7. style and stigma; 8. capsule; 9. transverse section of capsule; 10 ~ 17. *Begonia versicolor* Irmsch. 10. plant; 11. male flower; 12. internal petal of male flower; 13. external petal of male flower; 14. stamen; 15. femal flower; 16. style and stigma; 17. capsule (Drawn by Wu Xi – Lin)

Flores♀: tepala 5(-4), rosea vel alba, obovata, interne sensim diminuta, 1.1~1.6cm longa, 0.6~1.3 cm lata, extus parce brevisetulosa; ovarium late ovoideum, 0.6~0.7 cm longum, 0.8~0.9 cm latum, triloculatum, trialatum, in quoque loculo placentae segmentis 2; styli 3, stigmatibus 2-ramosis, spiraliter contortis, papillosis.

Yunnan(云南): Malipo Xian(麻栗坡县), Huangjing Ying(黄金营), C. W. Wang(王启无) 83828 (holotype in KUN); Xichou Xian(西畴县) Xiaoqiaogou(小桥沟) alt. 1 650 m, Ⅷ 1992, Shui Yuimin(税玉民) B92-120 (fl.♀ in YUNU).

云南东南部(麻栗坡、西畴)。

本种原描述中称子房具侧膜胎座，从模式产地采集标本观察，子房3室中轴胎座，每室胎座裂片2，故移至秋海棠组。

扁果组 Sect. Platycentrum Klotz.

1. 薄叶秋海棠 图4.

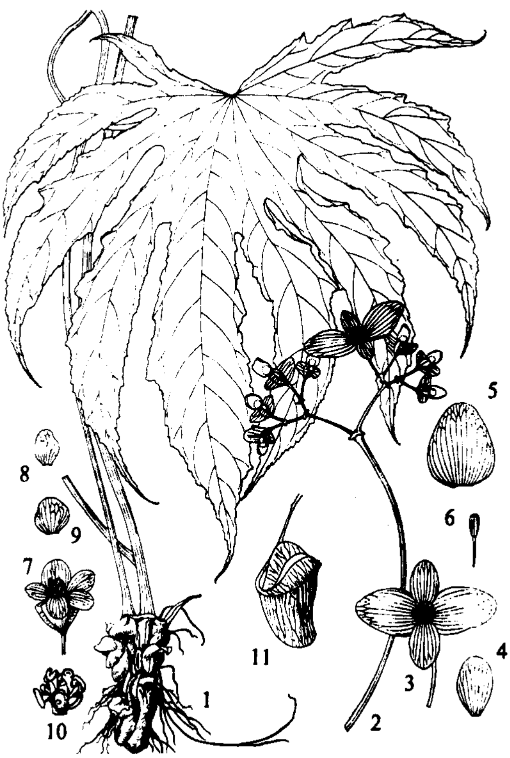


图4. 薄叶秋海棠

1. 植物体; 2. 花序; 3. 雄花; 4. 雄花内被片; 5. 雄花外被片; 6. 雄蕊; 7. 雌花; 8. 雌花内被片; 9. 雌花外被片; 10. 花柱和柱头; 11. 蒴果(吴锡麟绘)

Fig. 4 *Begonia laminariae* Irmsch. 1. plant; 2. inflorescence; 3. male flower; 4. internal petal of male flower; 5. external petal of male flower; 6. stamen; 7. female flower; 8. internal petal of female flower; 9. external petal of female flower; 10. style and stigma; 11. capsule (Drawn by Wu Xi-Lin).

Begonia laminariae Irmsch. in Notes Roy. Bot. Gard. Edinb. 21: 40(1951); 图鉴补编 2: 534, 540(1983); 云南种子植物名录(上册), 351 (1984); L. B. Smith et al. "Begoniaceae", 16, 188(1986).

Begonia circumlobata auct. non Hance: Yüin Bull. Fan Mem. Inst. Biol. 1(2): 124 (1948). p. p. quoad C. W. Wang 831611.

Add describ.

Flores ♂: pedicelli 1.5~1.8 cm longi; tepala 4, rosea, 2 exteriora ovata, 1.5~1.9 cm longa, 1.3~1.6 cm lata, extus parce hirsuta, 2 interiora minora, oblonga, alba, 1~1.5 cm longa, 0.6~0.8 cm lata, glabra; stamina numerosa, androphoro 2.5 mm longo, filamentis 2~2.2 mm longis, antheris obovatis, 2 mm longis, connectivis apice obtriangulatis, leviter productis. Flores ♀: Pedicelli 1.2-1.6 cm longi; tepala 5, rosea, ovata ad oblonga, interiores sensim diminuta, 1.4~1.7 cm longa, 0.7~1 cm lata, extus glabra vel parce villosa; ovarium biloculatum, glabrum vel parce villosum, inaequaliter trialatum, in quoque loculo placentae segmentis 2, bifidis; styli 2, stigmatibus 2-ramosis spiraliter contortis, papillosis.

Yunnan(云南):Malipo Xian(麻栗坡县)Huang jinying(黄金营), alt. 1 200 m,C. W. Wang (王启无)83161 (holotype in KUN);Pingbian Xian(屏边县)Daweishan (大围山)alt. 1 620 m, Ⅶ 1991, Shui Yumin(税玉民)B91 - 505 (fl. ♂♀ in YUNU).

产云南东南部(麻栗坡、马关、西畴、屏边)。广西、贵州也有分布。分布至越南北方。

2 **截裂秋海棠** 图 5:1~3.

Begonia truncatiloba Irmsch. in Mitt. Inst. Allg. Bot. Hamburg.10: 534(1939); L. B. Smith *et al*. "Begoniaceae" 318(1986), fig. 4. 49.

Add. describ.

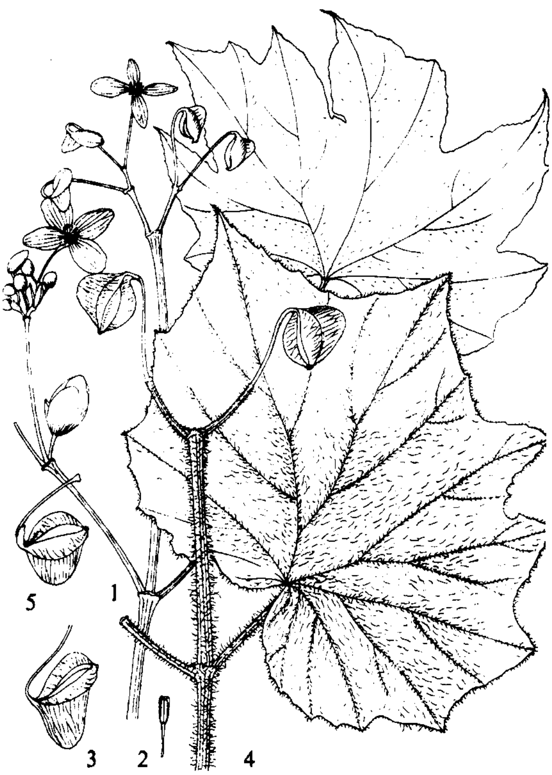


图5 1~3 截裂秋海棠 1. 花枝; 2. 雄蕊; 3. 蒴果; 4~5:长柔毛秋海棠 4. 果枝; 5. 蒴果(吴锡麟绘)

Fig. 5 1~3 *Begonia truncatiloba* Irmsch. 1. flowering branch; 2. stamen; 3. capsule; 4~5: *Begonia villifolia* Irmsch. 4. fruit branch; 5. capsule (Drawn by Wu Xi-Lin).

Flores ♀: pedicelli 3.2~3.7 cm longi; tepala 5, alba, interiores sensim diminuta, elliptica ad ovata, 1~1.5 cm longa, 0.7~1 cm lata, extus parce puberula; ovarium biloculatum, parce puberulum, trialatum, in quoque loculo placentae segmentis 2, bipartis; styli 2, stigmatibus 2 - ramosis, spiraliter contortis, papillosis.

Yunnan(云南): Mengzi Xian(蒙自县) Henry n. 13537 (holotype in K);Jinping Xian(金平县), Yongping xiang,(永平乡)Xinzhai(新寨),alt. 1 500 m, Ⅷ 1991, Shui Yumin(税玉民)B91 - 624 (fl. ♀, in YUNU).

产云南东南部(西畴、屏边、金平、蒙自)。

3. **长柔毛秋海棠** 图 5: 4~5.

Begonia villifolia Irmsch. in Roy. Bot. Gard. Edinb. 21: 43(1951);图鉴补编 2: 535, 540(1983);云南种子植物名录(上册), 352(1984);L. B. Smith et al. "Begoniaceae" 116, 117, 328(1986), fig. 5. 34.

Add. describ.

Flores ♂: pedicelli 2.2~2.7 cm longi; tepala 4, alba vel roseola, 2 exteriora ovata, 2.2~2.4 cmlonga, 1.9~2.1 cm lata, extus dense longihirsuta, 2 interiora oblonga vel ovata, 1.5~1.7 cm longa, 0.9~1.2 cm lata , glabra; stamina numerosa, distincta, filamentis 1.5 mm longis; antheris oblongis, 2.5 mm longis, connectivis productis 1 mm longo, apice acutis. Flores ♀: pedicelli 2.4~3 cm longi; tepala 5, alba, ovata ad orbiculata, interiora sensim diminuta,1.6~2.2 cm longa, 1~1.8 cm lata, extus dense hirsuta; ovarium biloculatum, trialatum, dense hirsutum, in quoque loculo placentae segmentis 2; styli 2, stigmati-

bus 2 – ramosis, spiraliter contortis, papillosis. Capsula late ovoidea, 1.8 ~ 2.1 cm longa, 1.7 ~ 1.9 cm lata, inaequaliter trialata, ala major triangulata, apice rotundata, 0.8 ~ 1.5 cm longa, 0.8 ~ 1.1 cm lata, leviter descendenti, ceteris alis angustis, lunatis, 0.3 ~ 0.4 cm longis.

Yunnan(云南): Pingbian Xian(屏边县), C. W. Wang 83071 (holotype in KUN); Malipo Xian(麻栗坡县), Douchidian(豆豉店), alt. 1 170 – 1 300 m, I 1991, Shui Yumin(税玉民) B91 – 189 (fl. in YUNU); Pingbian Xian(屏边县) Daweishan (大围山), alt. 1 420m, XII 1990, Shui Yumin(税玉民) B90 – 28 (fr. in YUNU)

产云南东南部（麻栗坡、马关、西畴、屏边）。

原描述中本种模式标本未引证所存标本室，恐为遗漏。我们观察到作者引证的模式标本（C. W. Wang 83071）现存昆明植物所标本室，故于本文中注明。

4. **光叶秋海棠** 图 7: 5 ~ 6.

Begonia psilophylla Irmsch. in Roy. Bot. Gard. Edinb. 21: 39 (1951); 图鉴补编 2: 537, 539 (1983); 云南种子植物名录(上册), 351(1984); L. B. Smith *et al*. "Begoniaceae", 32, 366 (1986), fig. 11. 18.—— *Begonia megaptera* auct. non DC.: Yü in Bull. Fan. Mem. Inst. Biol. 1(2): 122 (1948). quoad F. T. Wang 2523.

Add describ.

Capsula obovoideo – oblonga, 1 cm longa, 0.5 cm lata, inaequaliter trialata, ala major linguiformis, 1.2 ~ 1.5 cm longa, 0.7 ~ 1 cm lata, nervis reticulata, glabra, margine superiore descendenti, inferiore leviter ascendenti, ceteris alis aequaliter oblongis, 0.4 cm longis, 1 cm latis.

Yunnan(云南): Hekou Xian(河口县) Mahuang bao(蚂蝗堡) F. T. Wang 2523 (holotype in KUN); in ibid Nan xi(南溪) Machang(马场), alt. 420 m, 1991 Shui Yumin(税玉民) B91 – 01 (fr. in YUNU).

产云南东南部(河口、模式产地)。

5. **变色秋海棠** 图 3: 10 ~ 17.

Begonia versicolor Irmsch. in Mitt. Inst. Allg. Bot. Hamburg. 10: 546 (1939); 图鉴补编 2: 537, 542(1983); 云南种子植物名录(上册), 352(1984); L. B. Smith et al. "Begoniaceae" 86, 88, 492(1986) fig. 25 – 23.

Add describ.

Flores ♂: pedicelli 2.5 ~ 3 cm longi; tepala 4(– 5), rosea, 2 exteriora lata ovata, 1.6 ~ 1.9 cm longa, 1.5 ~ 1.8 cm lata, extus rubrohirsuta, 2(~ 3) interiora, alba, obovata, 1 cm longa, 0.5 ~ 0.7 cm lata, glabra; stamina numerosa, androphoro 3 mm longo, filamentis 1 mm longis; antheris obovatis, connectivis leviter productis, apice obtusis vel emarginatis.

Yunnan(云南): Mengzi(蒙自) Hancock n. 468 (holotype in K); Malipo Xian (麻栗坡县) Douchidian(豆豉店), alt. 1 280 ~ 1 320 m, VIII 1991, Shui Yumin(税玉民) B91 – 188 (fl. ♂ in YUNU)

产云南东南部(麻栗坡、马关、西畴、屏边、蒙自)。

6. **盈江秋海棠**(新种)图 6: 1 ~ 6.

Begonia yingjiangensis S. H. Huang, sp. nov.

Species *Begonia rhoephilae* Ridley affinis, sed caulis floriferis17 ~ 20 cm longis, Cymis 5 ~ 7 floribus; capsulis minoribus differt.

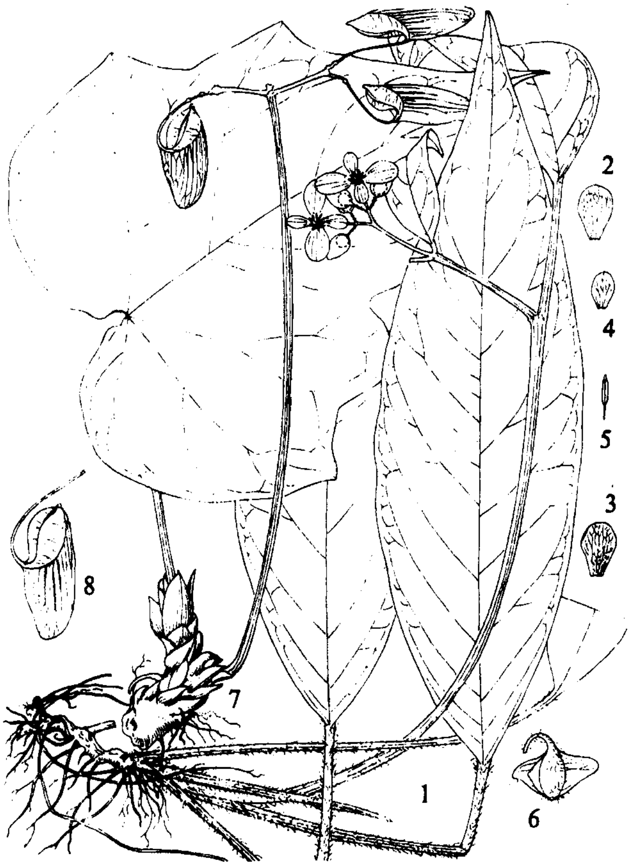


图6　1~6:盈江秋海棠　1. 花枝; 2. 雄花外被片的内面; 3. 雄花外被片的外面; 4. 雌花内被片; 5. 难蕊; 6. 蒴果; 7~8:蔓耗秋海棠　7. 植物体; 8. 蒴果(吴锡麟绘)

Fig. 6　1 ~ 6 *Begonai yingjiangensis* S. H. Huang. 1. flowering branch; 2. inside of external petal on male flower; 3. outside of external petal on male flower; 4. internal petal of male flower; 5. stamen; 6. capsule; 7 ~ 8. *Begonia manhaoensis* S. H. Huang et Shui 7. plant; 8. capsule. (Drawn by Wu Xi - Lin)

Herba perennis. Rhizoma repens, internodiis 1.5 ~ 2 cm longis. Caulis florifer 17 ~ 20 cm longus, 1 ~ 2 foliatus, brunneus pebuscens. Folia basalia, petioli 10.5 ~ 15 cm longi, 4mm diam., dense brunnei pubescentes; laminae lanceolatae, 22 ~ 29.5 cm longae, 5 ~ 7.5 cm latae, apice acuminatae, leviter caudatae, basi cuneatae, margine subintegrae vel leviter repandae, supra virides, subglabrae, subtus viridulae, secus nervos dense brunneae pubescentes, penninervis, subtus costis prominantibus, nervis lateralibus reticulatis. Cymae terminales, 5 ~ 7 - florae, pedunculo 3 ~ 9 cm longo. Flores ♂: pedicelli 1 cm longi, pubescentes; tepala 4, roseola, 2 exteriora majora, lata elliptica, 1 cm longa, 0.6 cm lata, apice rotundata vel leviter acuta, basi rotundata, extus basi pubescens, 2 interiora minora; stamina numerosa, distincta, filamentis 1 ~ 1.2 mm longis, antheris oblongis, circ. 1.5 mm longis, connectivis apice clavitis productis. Flores ♀: ignotes... Capsula elliptica, 8 mm longa, 6 mm lata, pedicello 1.5 cm longo, nutans, brunneo - pubescens, bilocularis in quoque loculo placentae segmentis 2 praedita, inaequaliter trialata, ala major brevis linguiformis, 5 mm longa, margine superiore leviter horizontali, margine inferiore ascendenti, ceteris alis minoribus, triangulatis, 3 mm longis.

Yunnan(云南): Yingjiang Xian(盈江县) Mangyun(芒允), alt. 1 100 m, Ⅷ 1980, Exped. Eco. Geobot. Yunnan, Univ(云大生态所调查队)10815 (holotype in YUNU).

本种近 Begonia rhoephila Ridley，但生花的茎长 17～20 cm，有 1～2 叶；聚伞花序 5～7 朵花；蒴果较小易区别。

7. **粉叶秋海棠**(新种) 图 7: 1～4.

Begonia subhowii S. H. Huang, sp. nov

Species *Begonia howii* Chun affinis, sed foliis oblique ovatis, basi oblique cordatis; cymis in alabastrum bracteis magnis; capsulis majoribus differt.

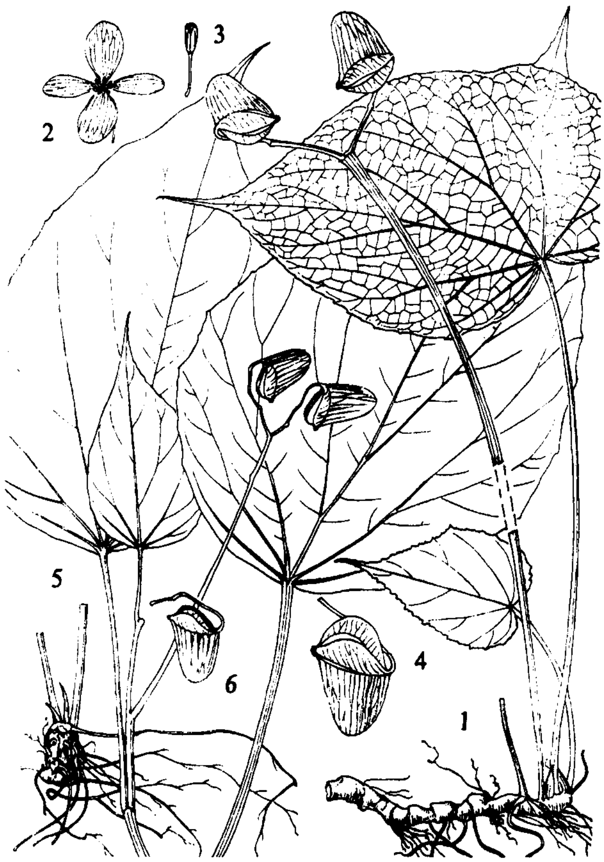


图7 1～4: 粉叶秋海棠 1. 植物体; 2. 雄花; 3. 雄蕊; 4. 蒴果; 5～6: 光叶秋海棠 5. 植物体; 6. 蒴果(吴锡麟绘)

Fig. 7 1～4 *Begonia subhowii* S. H. Huang et Shui. 1. plant; 2. male flower; 3. stamen; 4. capsule; 5～6 *Begonia psilophylla* Irmsch. 5. plant; 6. capsule. (Drawnby Wu Xi－Lin)

Herba perennis, glabra. Rhizoma repens, internodiis brevibus. Caulis florifer 13～28 cm longus, 1～2 foliatus. Petioli basalia, 18～2 cm longi, glabri; laminae oblique ovatae, 4.5～9 cm longae, 10～11 cm latae, apice acutae vel leviter caudatae, basi oblique cordatae, supra viridis, subtus glaucae, glabrae, margine repandae vel parce dendatae, vel 2～3 lobatae, palminervis 6～7. Cymae in alabastrum bracteo magno; bractae ovatae, 5 cm longae, 3 cm latae, apice acuminatae, glabrae, pedunculo 4～10 cm longo. Flores ♂: pedicelli 1.2 cm longi; tepala 4, 2 exteriora late elliptica, roseola vel alba, 2 cm longa, 1.2 cm lata, glabra, 2 interiora minora, oblonga, 1.5 cm longa, 0.6 cm lata; stamina numerosa, distincta, filamentis 1mm longis, antheris obovato－oblongis, 1.5 mm longis, connectivis apice productis, obtusis. Flores ♀: pedicelli 1.5 cm longi; tepala 5, roseola vel alba, late ovata vel late elliptica, interiores sensim diminuta; ovarium biloculatum inaequaliter trialatum, in quoque loculo placentae segmentis 2 praedita; styli 2, stigmatibus 2－ramosis, compressis spiraliter contortis, papillosis. Capsula elliptica, 1.5 cm longa, 0.7 cm lata, inaequeliter trialata, ala major linguiformis, 1.5 cm longa, 1.3 cm lata, nervis reticulatis, margine superiore descendenti, margine inferiore leviter ascendenti, ceteris alis minoribs, aequaliter, oblongis. 7 mm longis 1.5 cm latis, margine superiore leviter descendentis,

margine inferiore leviter ascendentis; pedicello 2 cm longo.

Yunnan(云南)：Malipo Xian(麻栗坡县)Jinchang(金厂), alt. 1 500 m, Ⅷ 1991, Shui Yumin(税玉民)B91－264 (holotype in YUNU), ibid. Ⅰ 1992, Shui Yumin(税玉民)B92－17; ibid. Ⅺ 1947, Feng Guomei(冯国楣)13081。

本种近 *Begonia howii* Chun,但叶偏斜卵形,基部偏斜心形;聚伞花序蕾时具大的苞片,果较大而异。

8. 河口秋海棠

Begonia hekouensis S. H. Huang, nom. nov.—— *Begonia gesnerioides* S. H. Huang & Shui in Acta Bot. Yunnan 16(4): 341～342 (1994) Nec *B. gesnerioides* L. B. Smith &B. G. Schubert in Field Mus. Nat. Hist. Bot. Ser., 13: 190, (1941).

产云南东南部(河口,南溪,花鱼洞为模式产地)。生海拔 250～400 m 石山季节雨林下。

9. 蔓耗秋海棠(新种) 图 6: 7～8.

Begonia manhaoensis S. H. Huang et Shui, sp. nov.

Species *B. repenticaulii* Irmsch. affinis, sed rhizomate robusto, internodiis brevibus, dense squamatis, foliis apice acutis vel acuminatis, utrinque pubescentibus, capsulis majoribus alis longis linguiformibus, alis ceteris aequalibus, minoribus, oblongis differt.

Herba perennis. Rhizoma repens, diam. circ. 1.5 cm. internodiis brevibus, squamis numerosis, membranaceis brunneis, ovato－lanceolatis, 1.3 cm longis, 0.7 cm latis, apice acuminatis, basi obtusis, extus parce villosis. Folia basalia: petioli 1.1～1.3 cm longi, 3.5～4 mm in diam. dense brunnei crispulo－villosi; laminae chartaceae, late ovatae inaequalaterales, 15～20 cm longae, 11～15 cm latae, apice acutae vel acuminatae, basi, oblique cordatae, margine lobatae, lobis triangularibus, subintegris vel leviter obscure serratis, supra parce pubescentes, subtus pubescentes, secus nervis dense pubescentes, nervis palmatis 5～6, basilaribus extrorsis 3～4, introrsis 2. Cymae pedunculo 22 cm longo, flores ignotes. Capsula oblonga, nutans, 1.5 cm longa, 0.6 cm lata, biloculata, in quoque loculo placentae segmentis 2 praedita; inaequaliter trialata, ala major linguiformis, 2 cm longa, 1.2 cm lata apice rotundata, nervis reticulatis, margine superiore descendenti, inferiore leviter horizontali, ceteris alis minoribus, aequalibus, oblongis, 5 mm longis, 1.5 cm latis.

Yunnan(云南): Gejiu Shi(个旧市)Manhao(蔓耗), alt. 350m, Ⅷ 1995, Chen Jiarui(陈家瑞)95311 (holotype in YUNU); Luchun (绿春), Mayu(玛玉), Ⅵ 1959 S. K. Wu. (武素功)3355 (KUN).

本种近匍匐秋海棠 *Begonia repenticaulis* Irmsch. 但根状茎粗壮，节间短，密生鳞片；叶先端锐尖或渐尖，两面被短柔毛。蒴果较大翅长舌状，其余 2 翅相等，较小，长圆形而区别。

侧膜组 Sect. Coelocentrum Irmsch

1. 斜叶秋海棠（新种）图 8: 1～10

Begonia obliquefolia S. H. Huang et Shui, sp. nov.

Species *Begonia cirrosae* L. B. Smith. et al. affinis, sed foliis supra puberulis, subtus pallidis

pubescentibus, cymis paucifloris, tepalis glabris, capsulis glabris differt.

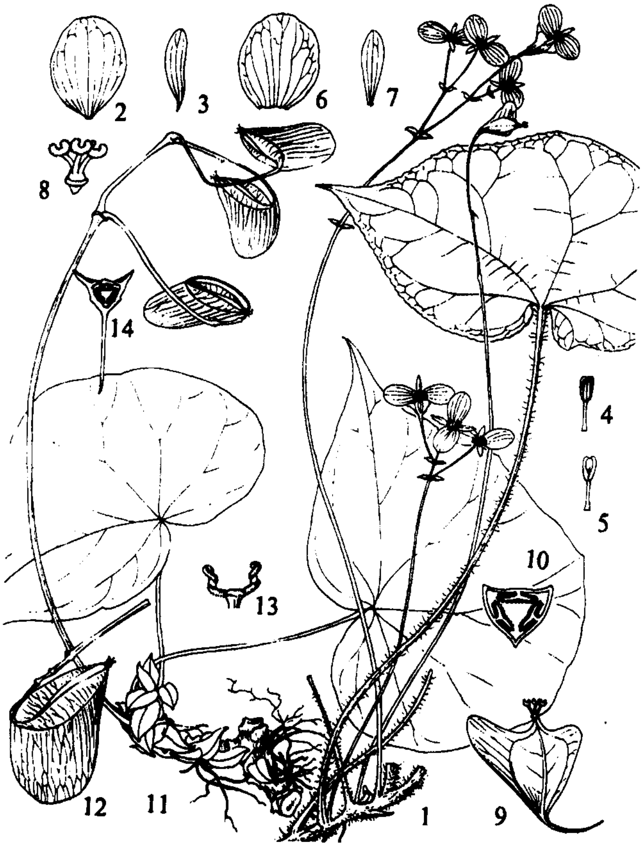


图8 1～10:斜叶秋海棠 1. 植物体; 2. 雄花外被片; 3. 雄花内被片; 4～5. 雄蕊腹、背面; 6. 雌花的外被片; 7. 雌花的内被片; 8. 花柱和柱头; 9. 蒴果; 10. 蒴果横切。11～14:假厚叶秋海棠 11. 植物体; 12. 蒴果; 13. 花柱(吴锡麟绘)

Fig. 8 1～10. *Begonia obliquefolia* S. H. Huang et Shui. 1. plant; 2. external petal of male flower; 3. internal petal of male flower; 4～5. ventral and dorsal side of stamen; 6. external petal of femal flower; 7. internal petal of female flower; 8. style and stigma; 9. capsule; 10. tranverse section of capsule; 11～14: *Begonia pseudodryadis* C. Y. Wu 11. plant; 12. capsule; 13. stigma; 14. transverse section of capsule. (Drawn by Wu Xi-Lin)

Herba perennis, acaulis. Rhizoma repens, internodiis 0.5～1 cm longis, circ. 0.5 cm diam., dense crispo-brunneo-villosum. Stipulae ovato-triangulae, 0.6cm longae, basi 0.5cm latae, apice acutae, extus leviter puberulae. Folia basalia: petioli 8～10 cm longi, rubri, crispo-brunneo-villosi; laminae oblique ovatae, 4.5～6 cm longae, 8.5～12.5 cm latae, apice longe acuminatae, basi oblique cordatae, supra virides, puberulae, subtus pallidae, nervis rubris, parce brunneo-pubescentes, secus nervis dense pubescentes, margine irregulate repandae et serrulatae, nervis palmates, nervis extrorsis basilaribus 3, lateralibus 1～2, introrsis basilaribus 1～2, lateralibus 1～2, subtus nervis reticulatis, prominentibus. Cymae pauciflorae, 3～4-florae, pedunculo 11～12 cm longo, valde parce puberulo; bracteae ovato-triangulae, 4 mm longae, basi 3 mm latae, apice acutae, margine parce ciliatae, bracteolae minores, late ovatae, 3 mm longae, apice obtusae, subglabrae. Flores ♂: pedicelli 1.5 cm longi, graciles, glabri; tepala 4, rosea, 2 exteriora late ovata vel suborbiculata, 1 cm longa, 0.8 cm lata, glabra, 2 interiora oblonga, 0.8 cm longa, 0.25 cm lata; stamina pauca, distincta, filamentis 1.2 mm longis, antheris obovato-oblongis, flavis, 1 mm longis, apice obtusis, connectivis vix dilatatis. Flores ♀: pedicelli 1.3～2.3 cm longi, glabri; tepala 3(-4), 2 exteriora major, suborbiculata, diam. circ. 11mm glabra, interiora minora, oblon-

ga, 8 mm longa, 3 mm lata, apice obtusa; ovarium uniloculare, inaequliter trialatum, placentae parietales; placentae segmenta 2, styli 3, stigmatibus contortis. Capsula elliptica, 1.2 cm longa, 0.5 cm lata, inaequaliter trialata, ala major triangulata, 6 mm longa, basi 1.2 cm lata, apice obtusa, margine superiore descendenti, margine inferiore ascendenti; ceteris alis minoribus, 3 mm longis, basi 1.2 cm latis, margine superiore leviter descendenti, margine inferiore ascendenti.

Yunnan(云南): Malipo Xian(麻栗坡县), Tiechang(铁厂), Guangao(官告), alt. 1 440 m, I 1992, Shui Yumin(税玉民)B92 - 20 (holotypus in YUNU, isotype in PE); ibid. Ⅵ 1991, Shui Yumin B91 - 226.

本种近卷毛秋海棠 *Begonia cirrosa* L. B. Smith & D. C. Wasshausen, 但叶上面被微柔毛,下面苍白色被短柔毛。聚伞花序少花,花被片无毛。蒴果无毛, 易区别。

2. **假厚叶秋海棠**　图 8: 11 ~ 14.

Begonia pseudodryadis C. Y. Wu in Act. Phytotax. Sinica 33 (3): 276 - 277(1995)

Add describ.:

Capsula oblonga, 1.8 cm longa, 0.5 cm lata, nutans, inaequliter trialata, ala major linguiformis, margine superiore descendenti, margine inferiore leviter ascendenti, ceteris alis aequalibus oblongis, 4 mm longis, 1.8 cm latis; stylis 3, basi leviter connati, stigmatibus 2 - ramosis, spiraliter contortis, pubescentibus, unilocularis; placentae parietales, placentae segmentis 2. pedicello 3.5cm longo.

Yunnan(云南): Pingbian Xian(屏边县)Yaoshan(瑶山), alt. 1 320 m, on mossy rocs, in valley, Ⅶ 1953, P. Y. Mao(毛品一)2389 (holotype in KUN); Hekou Xian(河口县)Lianhuatang xiang(莲花圹乡), Yaomaji(药马几), alt, 1 350 m, Ⅺ 1992, Shui Yumin(税玉民)001065 (fr. in YUNU); Maguan Xian(马关县), Gulinqing(古林箐), alt. 1 300 m, 30 Ⅻ 1997, Yuan Zhi - qiang (袁自强)01(fr. in KUN). 产滇东南(屏边、河口、马关)。